## **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in this Application:

## Listing of Claims:

- 1. (Canceled).
- 2. (Canceled).
- 3. (Canceled).
- 4. (Canceled).
- 5. (Canceled).
- 6. (Canceled).

martensitic structure;

- 7. (Currently amended) A process for lowering the Martensitic Transformation Temperature(As) of shape memory alloy having a low martensitic transformation temperature, said alloy comprising Copper and Zinc in the range of 62-86% of Copper and 10-28% of Zinc along with 6% to 10% of Aluminum, by a re-betatising treatment of previously high temperature betatised material, said process comprising the following steps of:
- (i) selecting an alloy <u>composition</u> comprising Copper and Zinc in the range of 62-86% of Copper and 10-28% of Zinc along with 6% of Aluminum;
- (ii) melting the alloy composition in an induction furnace operating in air under charcoal cover followed by casting into desired shapes to form a shaped material;
- (iii) homogenizing the above composition shaped material at 800° C for a period of about two hours followed by cooling;
  - (iv) surface machining the shaped material for removing oxide scale formation;

    (v)analyzing the alloy composition

    (vi)(v) re-heating the shaped material at about 575° C for about three minutes;

    (vii)(vi) quenching said shaped material with cold water for obtaining a fully

(viii)obtaining a fully martensitic structure;

(ix)identifying the soft shape memory material with martensitic structure; and

(x)(vii) recording the temperature and structure of the material.

- 8. (Canceled).
- 9. (Canceled).
- 10. (Canceled).
- 11. (Canceled).
- 12. (Currently amended) A process as claimed in claim 7, wherein the two-step betatising and resultant lowering of transformation temperature is valid for higher an Aluminum content of  $\frac{6 + 10 \% 6\%}{6}$  shape memory alloys.